**Ethics** in **IT**

**Class 8**

**Lab 4**

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| Lab Objectives:Types of Hacker  * Types of hacking |

# Hacker

## Hacking has been a part of computing for almost five decades and it is a very broad discipline, which covers a wide range of topics. The first known event of hacking had taken place in 1960 at MIT and at the same time, the term "Hacker" was originated.



# Hacking vs Ethical Hacking

## Hacking is the act of finding the possible entry points that exist in a computer system or a computer network and finally entering into them. Hacking is usually done to gain unauthorized access to a computer system or a computer network, either to harm the systems or to steal sensitive information available on the computer.

## Hacking is usually legal as long as it is being done to find weaknesses in a computer or network system for testing purpose. This sort of hacking is what we call ***Ethical Hacking***.



## A computer expert who does the act of hacking is called a "***Hacker***". Hackers are those who seek knowledge, to understand how systems operate, how they are designed, and then attempt to play with these systems.

# Types of Hacking

## We can segregate hacking into different categories, based on what is being hacked. Here is a set of examples −

## Website Hacking − Hacking a website means taking unauthorized control over a web server and its associated software such as databases and other interfaces.

## Network Hacking − Hacking a network means gathering information about a network by using tools like Telnet, NS lookup, Ping, Tracert, Netstat, etc. with the intent to harm the network system and hamper its operation.

## Email Hacking − It includes getting unauthorized access on an Email account and using it without taking the consent of its owner.

## Ethical Hacking − Ethical hacking involves finding weaknesses in a computer or network system for testing purpose and finally getting them fixed.

## Password Hacking − This is the process of recovering secret passwords from data that has been stored in or transmitted by a computer system.

## Computer Hacking − This is the process of stealing computer ID and password by applying hacking methods and getting unauthorized access to a computer system.

# Advantages of Hacking

## Hacking is quite useful in the following scenarios −

## To recover lost information, especially in case you lost your password.

## To perform penetration testing to strengthen computer and network security.

## To put adequate preventative measures in place to prevent security breaches.

## To have a computer system that prevents malicious hackers from gaining access.

# Disadvantages of Hacking

## Massive security breach.

## Unauthorized system access on private information.

## Privacy violation.

## Hampering system operation.

## Denial of service attacks.

## Malicious attack on the system.

# Ethical Hacking - Hacker Types

### White Hat Hackers

## White Hat hackers are also known as Ethical Hackers. They never intent to harm a system, rather they try to find out weaknesses in a computer or a network system as a part of penetration testing and vulnerability assessments.

## Ethical hacking is not illegal and it is one of the demanding jobs available in the IT industry.

### IMG_256

### Black Hat Hackers

## IMG_256Black Hat hackers, also known as crackers, are those who hack in order to gain unauthorized access to a system and harm its operations or steal sensitive information.

## Black Hat hacking is always illegal.

### Grey Hat Hackers

## Grey hat hackers are a blend of both black hat and white hat hackers.

### Elite Hackers

## This is a social status among hackers, which is used to describe the most skilled. Newly discovered exploits will circulate among these hackers.



### Script Kiddie

## A script kiddie is a non-expert who breaks into computer systems by using pre-packaged automated tools written by others, usually with little understanding of the underlying concept, hence the term Kiddie.

### Neophyte

## A neophyte, "n00b", or "newbie" or "Green Hat Hacker" is someone who is new to hacking or phreaking and has almost no knowledge or experience of the workings of technology and hacking.



### Hacktivist

## A hacktivist is a hacker who utilizes technology to announce a social, ideological, religious, or political message. In general, most hacktivism involves website defacement or denial of service attacks.